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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,966	10/24/2003	Mark A. Cleveland	024.0029	1845

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EXAMINER

PARSLEY, DAVID J

ART UNIT PAPER NUMBER

3643

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/692,966	Applicant(s) CLEVELAND, MARK A.	
	Examiner David J Parsley	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Amendment

1. This office action is in response to applicant's amendment dated 11-22-04 and this action is final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,129,306 to Fauvel or U.S. Patent No. 5,585,596 to Richards et al.

Referring to claim 1, Fauvel and Richards et al. disclose a low shock separation joint for coupling a first structure to a second structure comprising, a male member – at 5 of Fauvel and – at 16 of Richards et al., having a first major surface and a second major surface wherein at least one projection is formed on the first and second major surface – see for example proximate 5c and 11b in figure 1 of Fauvel and proximate 26 in figures 3-4 of Richards et al., a female member – at 7 of Fauvel and – at 18,28-32 of Richards et al., having a first flange and a second flange – see for example figure 1 of Fauvel and figures 3-4 of Richards et al., wherein at least

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one projection is formed on the first and second flange – see proximate 6b,7b of Fauvel and – in figures 3-4 of Richards et al., wherein the surfaces of the at least one projection on the first and second flange are respectively mated to surfaces of the at least one projection on the first and second major surface of the male member to prevent separation of the separation joint under tensile and compressive forces – see for example figures 1-2 of Fauvel and figures 3-4 of Richards et al., and an explosive device – at 10 of Fauvel and – at 40-46 of Richards et al., placed within a cavity of the female member – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al, the explosive device when detonated separates the male member from the female member – see for example proximate item 15 in figure 1-3 of Fauvel and figures 4a-4d in Richards et al.

Referring to claim 2, Fauvel and Richards et al. further disclose the female member further includes a mount – see proximate 6a,7a of Fauvel and – proximate 20 in figures 3-4 of Richards et al., for attachment to the first structure – at 2,4,11 of Fauvel and – at 10 of Richards et al.

Referring to claim 3, Fauvel and Richards et al. further disclose the female member comprises a first and a second half structure – see proximate 6c,7c of Fauvel and – see figures 3-4 of Richards et al., wherein the first half structure and includes the first flange – see figures 1 and 3 of Fauvel and figures 3-4 of Richards et al., wherein the second half structure includes the second flange – see for example figures 1-2 of Fauvel and figures 3-4 of Richards et al., and wherein the first and second flanges oppose one another when the first and second half structures are coupled together – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al.

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Referring to claim 4, Fauvel and Richards et al. further disclose a clevis – proximate 6c,7c of Fauvel and – proximate 32 of Richards et al., is formed for receiving the first structure – at 2,4,11 of Fauvel and – at 10 of Richards et al., when the first and second half structures of the female member are coupled together and wherein the clevis comprises a portion of both the first and second half structures of the female member – see for example figures 1 and 3 of Fauvel and figures 3-4 Richards et al.

Referring to claim 5, Fauvel and Richards et al. further disclose the male member is placed between the first and second flange and wherein the fastening of the first structure to the clevis of the female member couples the female member to the male member – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al.

Referring to claim 6, Fauvel and Richards et al. further disclose surfaces of the at least one projection of the first and second flange mated respectively to surfaces of the at least one projection of the first and second major surfaces of the male members are non-locking – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al.

Referring to claim 7, Fauvel and Richards et al. further disclose the explosive device when detonated bends the first and second flange away from the male member and wherein the first and second flange move in an arc away from the male member – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al.

Referring to claim 10, Fauvel and Richards et al. further disclose the male member includes a mount – at 5a1 of Fauvel and – proximate 20 of Richards et al., for attachment to the second structure – at 3 of Fauvel and – at 12 of Richards et al. – see for example figures 1 and 3 of Fauvel and figures 3-4 of Richards et al.

Claims 8-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Richards et al.

Referring to claim 8, Richards et al. discloses the explosive device – at 40-46, has a first volume – see figures 4a-4b, within the cavity of the female member prior to detonation, wherein the explosive device has a second volume – see figures 4c-4d, after detonation and wherein the second volume is greater than the first volume – see for example figures 4a-4d.

Referring to claim 9, Richards et al. discloses the explosive device – at 40-46, has an expandable housing – at 46, around an explosive material – at 40-42, and wherein the expandable housing does not rupture when the explosive material is detonated – see for example figures 4a-4d.

Referring to claim 11, Richards et al. discloses the female member – at 18, comprises a deformable metal – see for example column 8 lines 45-63.

Response to Arguments

3. Regarding claims 1-7, the Fauvel reference US 5129306 does disclose that the explosive device – at 10, when detonated separates the male member – at 5 or 11, from the female member – at 6,7 as seen in figures 1-3, where the devices 5 and 11 split from each other via the notches – 15 – see column 4 lines 17-30. Therefore, the female portion separates into multiple pieces with a portion of the female member – at 6,7, separating from either of the male members – at 5 or 11, after the explosive device is detonated.

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Regarding claims 1-11, the Richards et al. reference US 5585596 does disclose the male member – at 16, with a projection – at 26 as seen in figures 3-4, and a female member – at 18, with flanges – at the upper and lower portions of 18 as seen in figures 3-4, with projections – the portions of item – 18, which extend around the explosive – at 42, and the male member – at 16 as seen in figures 3-4, which are connected to the projection – at 26 in the male member – at 16 as seen in figures 3-4.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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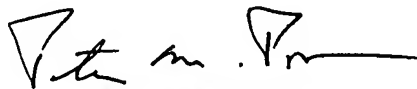
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J Parsley whose telephone number is (703) 306-0552. The examiner can normally be reached on 9hr compressed.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (703) 308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Parsley
Patent Examiner
Art Unit 3643



PETER M. POON
SUPERVISORY PATENT EXAMINER

1/25/05